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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,174	08/30/2004	Charles Hepfner		5173

7590

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9501-103 ST  
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EXAMINER

RODRIGUEZ, JOSEPH C

ART UNIT

PAPER NUMBER

3653

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/711,174		HEPFNER ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Joseph C. Rodriguez		3653	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-20 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 13 is/are rejected.
- 7) ☒ Claim(s) 8-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/30/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Specification***

***Claim Objections***

Claim 1 is objected to because of the following informalities:

Claim 1, line 10, "...seeds to roll." should read "...seeds to roll;"

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "the second screen". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, 3 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Satake (US 3,807,554)("Satake '554").

Satake '554 (Fig. 10-14) teaches an apparatus for separating components of a mixture, said apparatus comprising:

- (a) a frame (inherent);
- (b) a flat plate (1) connected to the frame with a proximal feed end and a distal discharge end, wherein the flat plate is positioned to decline downwardly from the feed end to the discharge end (Fig. 1);
- (c) feeding means (2) attached to the frame for feeding the components onto the feed end of the flat plate (Fig. 1);
- (d) oscillating means (26) attached to the frame for oscillating the flat plate in the plane of the plate; and
- (e) collection means (near 8 with upper walls above baffle 13 regarded as gravity slide and walls of troughs regarded as conveying means) at the discharge end of the flat plate adapted for selectively collecting, at one or more timed intervals, the components that discharge at the end of the plate (col. 4, ln. 66-col. 5, ln. 8 describing baffle that directs objects into respective troughs based on time). Further, Applicant is respectfully reminded that claim language consisting of functional language and/or intended use phrasing is given little, if any, patentable weight as the apparatus must merely be capable of functioning, or being used, as claimed. See MPEP 2112.02, 2114. Here, the apparatus is certainly capable of sorting a seed mixture such that round seeds are separated at the earliest based on their ability to roll.

Claims 1, 3, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kleiser (US 2,958,421).

Kleiser (Fig. 1-6) teaches an apparatus for separating components of a mixture, said apparatus comprising:

- (a) a frame (10, 29);
- (b) a flat plate (28) connected to the frame with a proximal feed end and a distal discharge end, wherein the flat plate is positioned to decline downwardly from the feed end to the discharge end (Fig. 1);
- (c) feeding means (31) attached to the frame for feeding the components onto the feed end of the flat plate (Fig. 12);
- (d) oscillating means (26) attached to the frame for oscillating the flat plate in the plane of the plate; and
- (e) collection means (Fig. 1, from baffles 32 to bags 34 with conveying means 33) at the discharge end of the flat plate. Further, Applicant is respectfully reminded that claim language consisting of functional language and/or intended use phrasing is given little, if any, patentable weight as the apparatus must merely be capable of functioning, or being used, as claimed. See MPEP 2112.02, 2114. Here, the apparatus is certainly capable of sorting a seed mixture such that round seeds are separated at the earliest based on their ability to roll. Further, the baffles are regarded as capable of selectively collecting, at one or more timed intervals, the components at the discharge end of the plate as said baffles can be adjusted to cover the respective discharge troughs at different times.

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Claims 1-3 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hubach (US 3,826,367).

Hubach (Fig. 1-4) teaches an apparatus for separating components of a mixture, said apparatus comprising:

(a) a frame (10, 29);

(b) a plurality of flat plates (Fig. 1, decks 14, 16) substantially parallel and spaced apart from one another wherein the plates are staggered relative to their feed ends, said plates connected to the frame with a proximal feed end and a distal discharge end, wherein the flat plate is positioned to decline downwardly from the feed end to the discharge end;

(c) feeding means (12, 13) attached to the frame for feeding the components onto the feed end of the flat plate;

(d) oscillating means (18) attached to the frame for oscillating the flat plate in the plane of the plate; and

(e) collection means (Fig. 4, 5 from 20 to bins 64, 66 with gravity slides 54, 56) at the discharge end of the flat plate. Further, Applicant is respectfully reminded that claim language consisting of functional language and/or intended use phrasing is given little, if any, patentable weight as the apparatus must merely be capable of functioning, or being used, as claimed. See MPEP 2112.02, 2114. Here, the apparatus is certainly capable of sorting a seed mixture such that round seeds are separated at the earliest based on their ability to roll. Further, the baffles are regarded as capable of selectively

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collecting, at one or more timed intervals, the components that discharge at the end of the plates as said bins *can* collect objects at different intervals.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Satake '554 in view of Satake (US 4,513,867)(Satake '867).

Satake '554 as set forth above teaches all that is claimed except for expressly teaching an air cleaning system adapted to direct an air blast at the flat plate so as to clean the plate of components which did not roll. This feature, however, is well-known in the sorting arts. In fact, Satake '554, in an alternate embodiment, already teaches using air blasts to remove dust from the flat plates to allow the objects to be sorted more accurately (Fig. 15, 16; col. 6, ln. 1-38). Satake '867 also teaches the removal of dust with air blasts to allow for more accurate sorting (Abstract). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Satake '554 as taught above.

***Allowable Subject Matter***



Claims 14-20 are allowed.

Claims 8-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Joseph C Rodriguez** whose telephone number is **571-272-6942** (M-F, 9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

The examiner's **UNOFFICIAL Personal fax number** is **571-273-6942**.

Further, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only.

For more information about the PAIR system, see



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<http://pair-direct.uspto.gov>

Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at **866-217-9197** (Toll Free).

Alternatively, inquiries of a general nature or relating to the status of this application or proceeding can also be directed to the **Receptionist** whose telephone number is **571-272-6584** or to the Supervisory Examiner, Kathy Matecki, **571-272-6951**.

Signed by Examiner Joseph Rodriguez

jcr

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May 3, 2006

A handwritten signature in black ink, appearing to be 'JR' followed by a long, sweeping horizontal stroke.